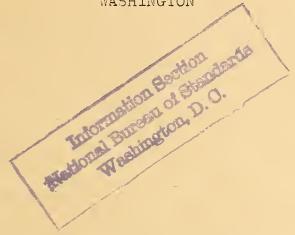
U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

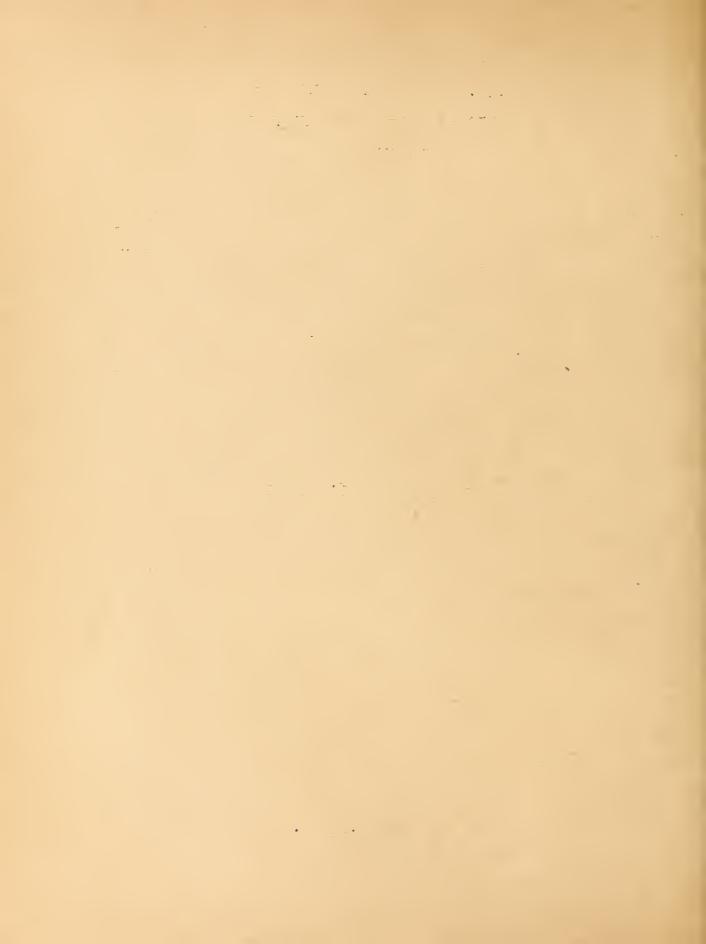
WASHINGTON

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Letter Circular LC-611

SOURCES OF RADIO INFORMATION



JHD:ANK I-6

U. S. DEPARTMENT OF COMMERCE NATIONAL BUREAU OF STANDARDS Washington

Letter Circular LC-611 (Supersedes LC-578)

October 9, 1940.

SCURCES OF RADIO INFORMATION

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1. <u>U. S. Government Radio Publications</u>

The papers on radio subjects issued by the National Bureau of Standards are published either by the Government Printing Office or in various periodicals. Most of them are of interest primarily to the radio engineer or scientist. A list of the current radio publications can be secured by addressing a request to National Bureau of Standards, Washington, D.C. News of the Bureau's radio work, and announcements of new publications, are given in "Technical News Bulletin", a monthly publication which may be obtained by mail in the U. S. for 50 cents per year from Superintendent of Documents, Government Printing Office, Washington, D.C. The notices of new publications state the prices at which each may be purchased from the Superintendent of Documents. The publications of the National Bureau of Standards cover many subjects, including, besides radio, electricity, light, sound, heat, chemistry, metallurgy, engineering materials, standards of weight and measure, and many other scientific and technical subjects.

The laws and regulations governing radio are given in publications listed in Section 3 below.

2. Publications of International Bureau of the Telecommunication Union, Berne, Switzerland.

The following world-wide lists of radio transmitting stations are available from the International Bureau, at the prices stated:

List of frequencies, and supplements. (23 Swiss francs, including postage).

List of coast stations and ship stations. (5.30 Swiss francs, including postage).

List of aircraft and aeronautical stations. (3.60 Swiss francs, including postage).

List of broadcasting stations, and supplements. (4.50 Swiss francs, including postage).

List of stations performing special services, and supplements. (5.75 Swiss francs, including postage).

List of call letters of fixed, land, and mobile stations, and supplements. (10 Swiss francs, including postage).

List of fixed stations. (£.00 Swiss francs, including postage).

Remittance should be made by international money order to the International Bureau of the Telecommunication Union, Berne, Switzerland.

3. Rodio Laws and Regulations.

Publications. - Radio is regulated internationally by the International Telecommunications Convention and the General Radio Regulations. The Convention is published in a book, "International Radiotelegraph Conference, Madrid, 1932" (State Department Publication S40, Conference Series 15), price 30 cents; and in a book, "Telecommunication" (State Department Treaty Series No. 867), price 20 cents: both obtainable from Superintendent of Documents, Government Printing Office, Washington, D.C. The General Radio Regulations are published in a book, "International Telecommunications Conferences, Cairo 1935" (State Department Publication 1286, Conference Series 39), obtainable for 45 cents from Superintendent of Documents, Government Printing Office, Washington, D.C.

International actions on radio, not having the force of law but used as a guide in national regulations and practice, are the Opinions of the International Consulting Committee. Those in force are given in two publications: "International Radio Consult-

ing Committee, Lisbon 1934, Report of the Delegation of the U.S.A." (State Department Fublication 827, Conference Series 21), price 50 cents; and "International Radio Consulting Committee, Bucharest 1937, Report of the Delegation of the U.S.A." (State Department Publication 1352, Conference Series 41), price 35 cents; both obtainable from Superintendent of Documents, Government Printing Office, Washington, D.C.

The radio laws of the United States are given in "The Communications Act of 1934 with amendments and indexes thereto, to May 20, 1937", price 10 cents; and "Radio laws of the United States, compiled by Elmer A. Lewis, 1939", price 10 cents: both obtainable from Superintendent of Documents, Government Printing Office, Washington, D.C.

The regulations issued by the Federal Communications Commission are published in the Federal Register, a daily publication obtainable from the Superintendent of Documents, Government Printing Office, at \$10 per year. These regulations are compiled in a series of pamphlets called "Federal Communications Commission Rules and Regulations," obtainable from the Superintendent of Documents, Government Printing Office. Those dealing with radio are listed here, with prices.

Part 1 - Rules of practice and procedure. 10¢.

Part 2 - General rules and regulations. 10ϕ .

Part 3 - Rules governing standard broadcast stations. 5¢. Part 4 - Rules governing broadcast services other than

standard broadcast. 5%.

Part 5 - Rules and regulations governing experimental radio services. 5¢.

Part 6 - Rules governing fixed public radio services. 5¢.

Part 7 - Rules governing coastal and marine relay services. 5¢.

Part 8 - Rules governing ship service. 10%.

Part 9 - Rules and regulations governing aviation services.

Part 10 - Rules governing emergency radio services. 5¢.

Part 11 - Rules governing miscellaneous radio services. 5¢.

Part 12 - Rules governing amateur radio: Stations and operators. 10¢.

Part 13 - Rules governing commercial radio operators. 5ϕ .

Part 14 - Rules governing radio stations in Alaska other than · amateur and broadcast. 5¢.

Of related interest are the following, issued by the Commission only in the Federal Register:

Standards of good engineering practice concerning standard broad-cast stations (550-1600 kc). Federal Register, pp.2862-2888, July 8, 1939.

Average sunrise and sunset time. Federal Register, pp.1618-1624, May: 2, 1940.

Safety Regulations. - All ordinary precautions required for the safe operation of any electrical equipment should be observed in every radio station; for example, all high-voltage wiring should be carefully insulated and kept as far as possible from other wiring and so placed as to minimize the possibility that persons may come in contact with it, and suitable danger tags should be displayed.

Insurance companies and city governments make certain requirements regarding electrical installations in buildings, radio antennas, etc. The usual requirements are summarized in a small book, the National Electrical Code, which may be obtained for five cents from the National Board of Fire Underwriters, 85 John Street, New York, N.Y.

Standard rules for safety procedure are given in the National Electrical Safety Code. The rules applicable to radio are given in "Safety Eules for Eadio Installations," National Bureau of Standards Handbook H35 (1939), which may be obtained for tencents from the Superintendent of Documents, Government Printing Office, Washington, D.C.

Licenses Required. The law provides that in order to operate any radio transmitting station, both a station license and an operator license must be secured. The law provides severe penalties for the operation of a transmitting station without proper licenses.

A station used only for receiving does not require a station license. Operators of stations used only for receiving do not require operators! licenses, but must maintain secrecy in regard to messages heard, other than broadcast messages.

Information and the necessary application blanks for transmitting station and operator licenses are obtainable from the Federal Communications Commission, Washington, D.C., or the field office of the Commission in the district in which the applicant resides.

Radio District No. 1.- (Includes: Connecticut, Maine, Massachusetts, New Hampshire, Phode Island and Vermont). Address: Inspector in Charge, Federal Communications Commission, Customhouse, 7th Floor, Boston, Mass.

Radio District No. 2.- (Includes: The Counties of Albany, Bronx, Columbia, Delaware, Dutchess, Greene, Kings, Nassau, Orange, New York, Putnam, Queens, Rensselaer, Richmond, Rockland, Schenectady, Suffolk, Sullivan, Ulster, and Westchester of the State of New York, and the Counties of Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union and Warren of the State of New Jersey). Address: Inspector in Charge, Federal Communications Commission, 748 Federal Bldg., 641 Washington St., New York, N.Y.

Radio District No. 3.- (Includes: Adams, Berks, Bucks, Carbon, Chester, Cumberland, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Perry, Philadelphia, Schuylkill, and York of the State of Pennsylvania, and the Counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Ocean, and Salem of the State of New Jersey; and the County of Newcastle, State of Delaware). Address: Inspector in Charge, Federal Communications Commission, Room 1200, New U. S. Customhouse, 2nd and Chestnut Sts., Philadelphia, Pa.

Radio District No.4.- (Includes: The State of Maryland, the District of Columbia, and the counties of Arlington, Clark, Fairfax, Fauquier, Frederick, Loudoun, Page, Prince William, Rappahannock, Shenandoah, and Warren of the State of Virginia, and the Counties of Kent and Sussex, of the State of Delaware). Address: Inspector in Charge, Federal Communications Commission, Fort McHenry, Baltimore, Md.

Radio District No. 5.- (Includes: The State of Virginia, except the Counties of Arlington, Clark, Fairfax, Fauquier, Frederick, Loudoun, Page, Prince William, Rappahannock, Shenandoah, and Warren; and the State of North Carolina except the Counties of Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Cleveland, Graham, Haywood, Henderson, Jackson, McDowell, Macon, Madison, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga and Yancy). Address: Inspector in Charge, Federal Communications Commission, Room 402, New Post Office Building, Norfolk, Va.

Ship Office. - Address: Radio Inspector, Federal Communications Commission, Room 26, U.S. Fost Office Bldg., Newport News, Va.

Radio District No. 6.- (Includes: The States of Georgia, South Carolina, Tennessee, and the Counties of Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Cleveland, Graham, Haywood, Henderson, Jackson, McDowell, Macon, Madison, Mitchell, Folk, Rutherford, Swain, Transylvania, Watauga and Yancy of the State of North Carolina, and the State of Alabama, except the Counties of Mobile and Baldwin). Address: Inspector in Charge, Federal Communications Commission, 411 Federal Annex, Atlanta, Ga.

Sub-Office. - Address: Radio Inspector, Federal Communications .. Commission, P. O. Box 77. (208 Post Office Bldg.), Savannah, Ga.

Radio District No. 7.- (Includes: The State of Florida except the County of Escambia. Address: Inspector in Charge, Federal Communications Commission, Post Office Box 150, (312 Federal Bldg.), Miami, Fla.

Sub-Office. - Address: Radio Inspector, Federal Communications Commission, 203 Post Office Bldg., Tampa, Fla.

Radio District No. 8.- (Includes: The States of Arkansas, Louisiana, Mississippi, and the City of Texarkana only of Texas, and the Counties of Mobile and Baldwin of the State of Alabama and the County of Escambia of the State of Florida). Address: Inspector in Charge, Federal Communications Commission, 326 Customhouse, New Orleans, La.

Radio District No. 9.- (Includes: The Counties of Aransas, Brazoria, Brooks, Calhoun, Cameron, Chambers, Fort Bend, Galveston, Goliad, Harris, Hidalgo, Jackson, Jefferson, Jim Wells, Kenedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio, Victoria, Wharton, and Willacy of the State of Texas). Address: Inspector in Charge, Federal Communications Commission, 404 Federal Bldg., Galveston, Texas.

Ship Office. - Address: Radio Inspector, Federal Communications Commission, 17 Post Office Bldg., Port Arthur, Texas.

Radio District No. 10.- (Includes: The State of Texas, except the Counties of Aransas, Brazoria, Brooks, Calhoun, Cameron, Chambers, Fort Bend, Galveston, Goliad, Harris, Hidalgo, Jackson, Jefferson, Jim Wells, Kenedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio, Victoria, Wharton, and Willacy, and the City of Texarkana, and the States of New Mexico and Oklahoma). Address: Inspector in Charge, Federal Communications Commission, P. O. Box 5373, (302 U.S.Terminal Annex Bldg.), Dallas, Texas.

Radio District No. 11.- (Includes: the State of Arizona, and the Counties of Imperial, Kern, Los Angeles, Inyo, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura of the State of California, and the County of Clarke of the State of Nevada). Address: Inspector in Charge, Federal Communications Commission, 1749 U. S. Post Office & Ct. House Bldg., Temple and Spring Sts., Los Angeles, Calif.

Sub-Office.- Address: Radio Inspector, Federal Communications Commission, 301 U.S. Customhouse & Ct. House Bldg., Union and F Sts., San Diego, Calif.

Ship Office. - Address: Radio Inspector, Room 326, U.S. Post Office and C.H. Bldg., San Pedro, Calif.

Radio District No. 12.- (Includes: The State of California, except the Counties of Imperial, Kern, Los Angeles, Inyo, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura; the State of Nevada, except the County of Clark; and Guam, Midway, and American Samoa). Address: Inspector in Charge, Federal Communications Commission, 328 Customhouse, San Francisco, Calif.

Radio District No. 13.- (Includes: The State of Oregon and the State of Idaho, except the Counties of Benevah, Bonner, Boundary, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Perce, and Shoshone). Address: Inspector in Charge, Federal Communications Commission, 207 New U.S. Courthouse, Portland, Oregon.

Radio District No. 14.- (Includes: Alaska; the State of Washington, the Counties of Benewah, Bonner, Boundary, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Ferce, and Shoshone of the State of Idaho, and the Counties of Beaverhead, Broadwater, Cascade, Deerlodge, Flathead, Gallatin, Glacier, Granite, Jefferson, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Fonders, Powell, Ravalli, Sanders, Silver Bow, Teton, and Toole of the State of Montana). Address: Inspector in Charge, Federal Communications Commission, 308 Federal Office Bldg., Seattle, Wash.

Sub-Office. - Address: Radio Inspector, Federal Communications Commission, P. O. Box 2719,/Juneau, Alaska.

(7-8 Shattuch Bldg.)

Radio District No. 15.- (Includes: the States of Colorado, Utah, Wyoming, and Montana, except the Counties of Beaverhead, Broadwater, Cascade, Deerlodge, Flathead, Gallatin, Glacier, Granite, Jefferson, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Mineral, Missoula, Ponders, Powell, Ravalli, Sanders, Silver Bow, Teton, and Toole). Address: Inspector in Charge, Federal Communications Commission, 504 Customhouse, Denver, Colo.

Radio District No. 16.- (Includes: the States of North Dakota, South Dakota, Minnesota, and the Counties of Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron Keeweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft of the State of Michigan, and the State of Wisconsin, except the Counties of Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, Jefferson, Kenosha, Lafayette, Milwauhee, Ozauhee, Racine, Richland, Rock, Sauk, Walworth, Washington, and Wauhesha). Address: Inspector in Charge, Federal Communications Commission, 208 Uptown F.O. & Fed. Cts. Bldg., 5th & Wash. Sts., St. Paul, Minn.

Radio District No. 17.- (Includes: The States of Nebraska, Kansas, Missouri, and Iowa, except the Counties of Allamakee, Buchanan, Cedar, Clayton, Clinton, Delaware, Des Moinos, Dubuque, Fayette, Henry, Jackson, Johnson, Jones, Lee, Linn, Louisa, Muscatine, Scott, Washington, and Winneshiek). Address: Inspector in Charge, Federal Communications Commission, 927 U. S. Court House, Kansas City, Mo.

Radio District No. 18.- (Includes: the States of Indiana, Illinois, and the Counties of Allamakee, Buchanan, Cedar, Clayton, Clinton, Delaware, Des Moines, Dubuque, Fayette, Henry, Jackson, Johnson, Jones, Lee, Linn, Louisa, Muscatine, Scott, Washington, and Winneshiek of the State of Iowa; and the Counties of Columbia,

Crawford, Dane, Dodge, Grant, Green, Iowa, Jefferson, Kenosha, Lafayette, Milwaukee, Ozaukee, Racine, Richland, Rock, Sauk, Walworth, Washington and Waukesha of the State of Wisconsin). Address: Inspector in Charge, Federal Communications Commission, 246 U. S. Courthouse Bldg., Chicago, Ill.

Radio District No. 19.- (Includes: the State of Michigan, except the Counties of Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton. Iron, Keeweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft; the States of Ohio, Kentucky, and West Virginia). Address: Inspector in Charge, Federal Communications Commission, 1025 New Federal Bldg., Detroit, Mich.

Sub-Office. - Address: Radio Inspector, Federal Communications Commission, 541 Old Fost Office Bldg., Cleveland, Ohio.

Radio District No. 20.- (Includes: the State of New York, except the Counties of Albany, Bronx, Columbia, Delaware, Dutchess, Greene, Kings, Nassau, New York, Orange, Futnam, Queens, Renselaer, Richmond, Rockland, Schenectady, Suffolk, Sullivan, Ulster, and Westchester; the State of Pennsylvania, except Adams, Berks, Buchs, Carbon, Chester, Cumberland, Dauphin, Delaware, Lancaster, Lebanan, Lehigh, Monroe, Montgomery, Northampton, Ferry, Fhiladelphia, Schuylkill, and York). Address: Inspector in Charge, Federal Communications Commission, 51% Federal Bldg., Buffalo, N.Y.

Radio District No. 21.- (Includes Territory of Hawaii). Address: Inspector in Charge, Federal Communications Commission, Aloha Tower, Honolulu, T.H.

Radio District No. 22. - (Includes: The Island of Fuerto Rico and the Virgin Islands). Address: Inspector in Charge, Federal Communications Commission, F.O.Box 2987 (322-323 Federal Bldg.), San Juan, F.R.

Examination for radio operators! licenses are held in the district offices listed above and in addition at:

Washington, D.C.
Schenectody, N.Y.
Schenectody, N.Y.
Winston-Salem, N.C.
Nashville, Tenn.
Savannah, Ga.
San Diego, Calif.
Tampa, Fla.
Juneau, Alaska

San Antonio, Tex.
Oklahoma City, Okla.
Des Moines, Iowa.
St. Louis, Mo.
Albuquerque, N.M.
Billings, Mont.
Bismarck, N.D.
Boise, Idaho
Butte, Mont.

Fittsburgh, Pa. Cleveland, Ohio Cincinnati, Ohio Columbus, Ohio Jacksonville, Fla. Little Rock, Ark. Phoenix, Ariz. Salt Lake City, U. Spokane, Wash.

4. Periodicals

The following is a partial list of periodicals largely devoted to radio. They are monthly, except where otherwise stated. A number of electrical and general magazines also publish considerable radio information.

A classified list of the articles of radio engineering interest appearing in periodicals is published each month in the Wireless Engineer, a British magazine listed below. A short abstract of each article is given.

Information on Government radio publications is given in Sections 1 and 3 above.

a. American Periodicals

- Bell System Technical Journal. Published by American Telephone and Telegraph Co., 195 Broadway, New York, N.Y. (Technical).(Quarterly).
- Communications. Bryan Davis Publishing Co., Inc., 19 E. 47th St., New York, N.Y. (Technical).
- Electrical Communication. International Standard Electric Corp., 67 Broad Street, New York, N.Y. (Technical).
- Electronics. McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., New York, N.Y. (Technical).
- General Radio Experimenter. Published by General Radio Co., 30 State Street, Cambridge, Mass. (Trade, technical).
- Philips Technical Review, Philips Technical Products, Inc., 419 Fourth Ave., New York, N.Y. (Technical).
- Proceedings of the Institute of Radio Engineers, 330 West 42nd St., New York, N.Y. (Technical).
- QST. Published by American Radio Relay League, West Hartford, Conn. (Technical).
- Radio. 1300 Kenwood Road, Santa Barbara, Calif. (Technical).
- Radio-Craft. Radcraft Publications, Inc., 99 Hudson St., New York, N.Y. (Semi-technical).
- Radio News and All-Wave Radio, 381 Eighth Ave., New York, N.Y. (Semi-technical).
 - Radio Retailing. Published by McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., New York, N.Y. (Trade).

- Radio Technical Digest. 1300 Kenwood Rd., Santa Barbara, Calif. (Technical).
- Radio and Television. Popular Book Corp., 99 Hudson St., New York, N.Y. (Semi-technical).
- Radio Today. Caldwell-Clements Inc., 480 Lexington Ave., New York, N.Y. (Trade).
- RCA Review. RCA Institutes Technical Press, 75 Varick St., New York, N.Y. (Technical).
- RMA Engineer. Engineering Division, Radio Manufacturers Association, 1317 National Press Bldg., Washington, D.C. (Technical).,

b. Foreign Periodicals

- Alta Frequenza. Associazione Elettrotecnica Italiana, Milano (2/2), Via San Paulo, N10. (Technical in Italian).
- Bullatin de la Société Française Radio-Electrique. 55 Rue Greffulhe, Levallois-Perret (Seine). (Technical - in Franch).
- Elektrische Nachrichten-Technik. Fublished by Weidmannschen Buchhandlung, Berlin S.W. 68, Germany. (Technical in German).
- Hochfrequenztechnik und Elektroakustik (also called Jahrbuch der Drahtlosen Telegraphie und Telephonie). Published by M. Krayn, Genthiner Strasse 39, Berlin WlO, Germany. (Technical in German).
- Institution of Electrical Engineers, Proc. Wireless Section (British); Chemical Pub. Co. of N.Y., Inc., 148 Lafayette St., New York, N.Y. (Technical).
- Marconi Review. Marconi's Wireless Telegraph Co., Ltd., Electra House, Victoria Embankment, London, England. (Technical).
- L'Onde Electrique. Published by E. Chiron, 40 rue de Seine, Paris, France. (Technical in French).
- Television and Short-Wave World. Bernard Jones Publications Ltd., Chansitor House, Chancery Lane, London, W.C.2, England. (Semi-technical).
- Wireless Engineer. Published by Iliffe & Sons, Ltd., Dorset House, Stamford St., London, S.E.I, England. (Technical).
- Wireless World. Published by Iliffe & Sons, Ltd., Dorset House, Stamford St., London, S.E.I, England. (Semi-technical).

.5. Books

This list comprises only a few of the many books published on the various phases of radio. Under each subject the books are in chronological order. As a matter of convenience, the prices of some of these books are given, but this information may not be up to date.

The sources of Government publications on radio are described in Sections 1 and 3 above.

a. Books on Radio Principles

- Principles of wireless telegraphy. G. W. Pierce. 1910. McGraw-Hill Book Co., Inc., 330 West 42nd St., New York, N.Y.
- Wireless Telegraphy. J. Zenneck. Translation by A. E. Seelig. 1915. 1st ed. McGraw-Hill Book Co., 330 W. 42nd St., New York, N.Y.
- Principles underlying radio communication. 2nd Edition. 1922. Signal Corps Radio Communication Pamphlet No. 40. Obtainable from the Superintendent of Documents, Government Printing Office, Washington, D.C. \$1.00.
- Robison's manual of radio telegraphy and telephony. 1927. United States Naval Institute, Annapolis, Md. \$4.00.
- Propagation of wireless waves. P. Pedersen. 1927. Vimmel-skaftet, Copehhagen, Denmark.
- Radio engineering principles. Lauer & Brown. 2nd edition. 1927.
 McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York, N.Y. \$3.50.
- Wireless principles and practice. L. S. Palmer. 1928. Longmans, Green & Co., New York, N.Y.
- Elements of radio communication. J. H. Morecroft. 1929. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$3.00.
- Radiotelegraphy and telephony. Duncan & Drew. 1929. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$7.50.
- Foundations of radio. R. L. Duncan. 1931. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$2.50.
- High-frequency alternating currents. K. McIlwain and J.G. Brainerd. 1931. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$6.00.

- Experimental radio engineering. J. H. Morecroft. 1931. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$3.50.
- The radio handbook. J.A. Moyer and J.F. Wostrel. 1931. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$3.50.
- Radio elementary principles. E. E. Burns. 1932. D. Van Nostrand Co., New York, N.Y. \$2.00.
- Elementary principles of wireless telegraphy. R. D. Bangay. Revised by O. F. Brown. 1933. Iliffe & Sons, Ltd., Dorset House, Stamford St., London, S.E.I, England.
- Principles of radio communication. J. H. Morecroft. 1934. 3d edition. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$7.50.
- Radio engineering handbook. K. Henney. 2d edition. 1935.

 McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York, N.Y.

 \$5.00.
- The book of practical radio. John Scott-Taggart. 1935. Wireless and Television Review, Cobbs Court, Broadway, London, E.C.4, England.
- Practical radio communication. A. R. Nilson and J. L. Horning. 1935. McGraw-Hill Book Co., 330 W. 42nd St., New York, N.Y. \$5.00.
- Phenomena in high-frequency systems, A. Hund. 1935. McGraw-Hill Book Co., 330 W. 42nd St., New York, N.Y. \$6:00.
- The fundamentals of radio. R. R. Ramsey. 2nd edition. 1935. Bloomington, Ind. \$3.50.
- Principles of radio engineering. R. S. Glasgow. 1936. McGraw-Hill Book Co., 330 W. 42nd St., New York, N.Y. \$4.00.
- Communication and electronics (Electrical Engineer's Handbook).

 H. Pender and K. McIlwaine. 1936. John Wiley & Sons, 440
 Fourth Ave., New York, N.Y. \$5.00.
- Communication engineering. W. L. Everett. 2nd edition. 1937. McGraw-Hill Book Co., Inc., 330 West 42nd St., New York, N.Y. \$5.00.
- Radio engineering. F. E. Terman. 2nd edition. 1937. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York, N.Y. \$5.50.
- Modern radio communication. J. H. Reyner. 2 volumes. 1938. Pitman Publishing Co., New York City.

- Experimental radio. 4th ed. 1938. R. R. Ramsey. Bloomington, Ind. \$2.75.
- Principles of radio. Keith Henney. 3d edition. 1938. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$3.50.
- The radio manual. G. E. Sterling. 1938. 2nd edition. D. Van Nostrand Co., 250 Fourth Ave., New York, N.Y. \$5.00.

b. Books on High Frequencies (Short Waves).

- Physik und Technik der Ultrakurzen Wellen. H. E. Hollmann. 1st Band-Erzeugung ultrakurzwelliger Schwingungen. (Physics and Engineering Development of Ultra-short Waves - Vol. 1 - Generation of ultra-short wave oscillations). J.Springer. 1936.
- Short wave wireless communication. A. W. Ladner and C. R. Stoner. 1937. 3d edition. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N.Y. \$4.50.
- Radio telephony handbook. 1938. Radio, 1300 Kenwood Rd., Santa Barbara, Calif. 75¢.
- "Radio" noise reduction handbook. 1938. Radio, 1300 Kenwood Rd., Santa Barbara, Calif. 35¢.
- "Radio" ultra-high-frequency handbook. 1938. Radio, 1300 Kenwood Rd., Santa Barbara, Calif. 50¢.
- The radio amateur's license manual. 1938. American Radio Relay League, W. Hartford, Conn. 25¢.
- Building an amateur radiotelephone. 1938. American Radio Relay League, W. Hartford, Conn. 25¢.
- Radio amateur course. 1938. Short Wave & Television, 99 Hudson St., New York City. 50¢.
- Short wave coil data book. 1938. Radio Publications, 97 Hudson St., New York City. 25%.
- Short wave radio. J. H. Reyner. 1938. Pitman Publishing Co., New York City.
- The medical applications of the short wave current. W. Bierman and M. M. Schwarzschild. 1938. William Wood & Co., Inc., Baltimore, Md.
- Short wave diathermy. Tibor de Cholnoky. 1938. Columbia University Press, New York City. \$4.00.

- "Radio" handbook. 1940. Radio, 1300 Kenwood Road, Santa Barbara, Calif. \$1.50.
- Radio antenna handbook. 1940. Radio, 1300 Kenwood Road, Santa Barbara, Calif. 75ϕ .
- Radio amateur newcomer's handbook. 1940. Radio, 1300 Kenwood Rd., Santa Barbara, Calif. 35¢.
- The radio anateur's handbook. 1940. American Radio Relay League, W. Hartford, Conn. \$1.00.
- The ARRL antenna handbook. 1940. American Radio Relay League, W. Hartford, Conn. 50%.
- How to become a radio amateur. 1940. American Radio Relay League, W. Hartford, Conn. 25¢.

c. Books on Radio Measurements.

- Prepared radio measurements with self-computing charts. Ralph Batcher. 1921. Wireless Press, Inc., 326 Broadway, New York, N.Y.
- Radio-frequency measurements. E. B. Moullin. 2d edition. 1931. J.B.Lippincott, 227 South 6th St., Philadelphia, Pa. \$12.50.
- High-frequency measurements. A. Hund. 1933. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York, N.Y. \$5.00.
- Measurements in radio engineering. F. E. Terman. 1935. McGraw-Hill Book Co., 330 W. 42nd St., New York, N.Y. \$4.00.
- Engineering Handbook of the National Association of Broadcasters. J. C. McNary. 1936. Published by National Association of Broadcasters, National Press Bldg., Washington, D.C. \$10.00.
- Alternating-current measurements at audio and radio frequencies. D. Owen. Methuen & Co., Ltd., London, England. 1937.
- Radio instruments and measurements. N.B.S.Circular 74. 1937.
 Reprint of book issued in 1924. Obtainable from Superintendent of Documents, Government Printing Office, Washington, D.C. 60 cents per copy.
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